

REMARKS

Claims 1 and 8 have been canceled without prejudice or disclaimer. Claims 2-5, 9, 10, 15 and 16 have been amended. Accordingly, claims 2-5, 9-12, 15 and 16 are currently pending in the application.

PRIORITY

Applicants appreciate the Examiner's acknowledgement of the claim for priority and safe receipt of the certified priority document.

DRAWINGS

Figures 2-5 have been amended to label them "Prior Art" as required by the Examiner. A separate letter to the Official Draftsperson is enclosed.

35 U.S.C. §102 AND §103

Claims 1-5, 8-12 and 15 stand rejected under 35 U.S.C. §102 as being anticipated by van Heeswyk et al. Claim 16

stands rejected under 35 U.S.C. §103 as being unpatentable over van Heeswyk et al in view of Casabona et al. These rejections are traversed as follows.

The present invention is directed to a wireless positioning method for estimating a position of a terminal by using reception timings of signals transmitted from at least first and second base stations in a cellular communication system. For purposes of explanation only, the embodiment shown in Figure 6 will be referenced. This embodiment should not be improperly read into any of the pending claims. Block 123 makes delay profiles of signals measured from the base stations. This block can be commonly used to measure the reception timings of all of the base stations sequentially (see specification page 9, line 1 through page 11, line 1). Once a delay profile 124 is generated, the replica 122 of this signal is subtracted in a subtractor 126 from the combined signal stored in a memory 5. The content of the memory is overwritten. The reception timing of a signal from a second base station is then measured and a similar processing is performed. Since the memory is overwritten in this manner, block 123 can be commonly used for measuring all of the reception timings. In addition, block 101 for despreading signals and block 107 for searching a propagation path are

also commonly used for plural base stations. This makes it possible to effectively cancel signals gradually while detecting reception timings without needing a large number of canceling circuits and timing measuring units.

This advantage cannot be realized by van Heeswyk et al. van Heeswyk et al are concerned with removing the extra interference created by a user being located during an emergency call so that the quality of other users' signals are not degraded (see column 2, lines 31-38). The uplink signals transmitted from the user's terminal and received by at least three base stations are used to locate the emergency call (see column 1, lines 53-56). On the other hand, according to the present invention, the terminal is located using downlink signals transmitted from a plurality of base stations and received by the terminal.

In addition, van Heeswyk et al disclose that subtraction circuitry 205 subtracts the interfering user signal reconstruction 274 which is output from block 202 from the delayed digitized baseband composite signal 119 of delay block 204 to produce the corrected baseband composite signal 207 (see Figure 7). This corrected baseband composite signal 207 is passed on to the plural baseband detection units 206, each of which detects a baseband signal for communication between

the base station and another user (see column 8, lines 14-34). Therefore, the first baseband detection unit 200 and the user signal reconstruction block 202 are used only for the user with the emergency call. In addition, no rewriting is done and the corrected composite signal 207 is used for communication.

On the other hand, as mentioned above, block 123 for making delay profiles, block 101 for despreading signals and block 107 for searching a propagation path are commonly used for plural base stations. Rewriting is done in memory 5, and the receiving signal in which the interfering signal is subtracted (i.e. canceled) is used for measuring reception timing (delay profile 124). As such, it is submitted that the pending claims patentably define the present invention over the cited art.

CONCLUSION

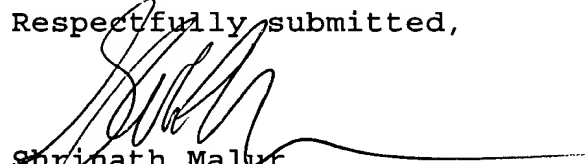
In view of the foregoing amendments and remarks, Applicants contend that the above-identified application is

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now in condition for allowance. Accordingly, reconsideration and reexamination are respectfully requested.

Respectfully submitted,



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